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(54) **GAS PERMSELECTIVE MEMBRANE**

(57) Abstract:

PURPOSE: To obtain a gas permselective membrane having an excellent coefft. of oxygen permeation and coefft. of oxygen/nitrogen sepn. by bringing a silicone compd. into reaction with a polymer consisting of a polyurethane using  $\alpha$ ,  $\omega$ -polybutadiene glycol.

CONSTITUTION: A polyhydric isocyanate compd. is brought into reaction with a prepolymer contg.  $\geq 90\%$

1,2-polybutadiene glycol under heating and a polyvalent hydroxy compd. is added as a chain extender thereto to prepare a polymer having a high mol.wt. After the polymer is refined in an alcohol, an isopropanol soln. of a chloroplatinic acid and silicone compd. are added to the polymer and the reaction is caused at 80 °C to obtain the silicone-modified polybutadiene polyurethane. The membrane is produced by using such polymer. A dimethyl methyl silane, triphenyl silane, pentamethyl disiloxane, etc., are used as the silicone compd.

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